

INTRODUCTION

The Clarion EQS744 is a full-featured seven-band stereo equalizer specifically designed for the mobile environment. Although it is housed in a one-half DIN enclosure, the EQS744 provides a number of exceptional features in its compact size, such as:

- Seven equalization bands (at 50Hz, 125Hz, 315Hz, 750Hz, 2.2kHz, 6kHz, 16kHz), adjustable from -12dB to +12dB.
- Low-pass crossover filter with selectable frequency control 60Hz or 90Hz.
- Three stereo RCA outputs to drive front, rear and subwoofer audio systems.
- Auxiliary stereo RCA inputs with adjustable gain control.
- Separate controls for master system volume, subwoofer volume, front/rear fader and selection of main or auxiliary inputs.

For optimum performance, the EQS744 should be installed by an *authorized* Clarion dealer.

ABOUT THE MANUAL AND WARRANTY

To start enjoying your new Clarion EQS744, please read the instructions listed in this manual. **Please read your warranty card and save your sale receipt.** Because these items are essential for warranty service.

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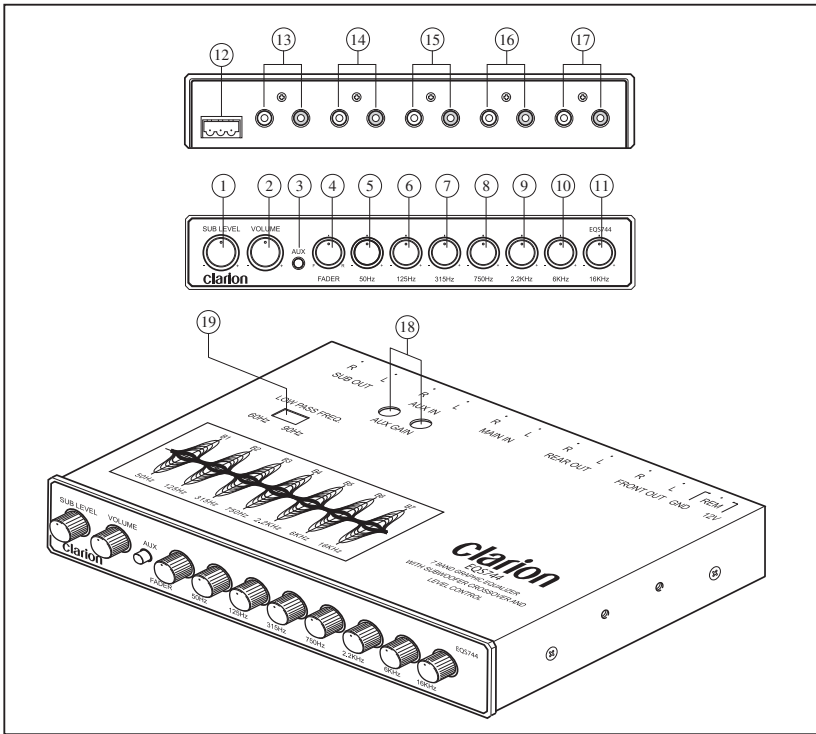
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DESCRIPTION

The Clarion EQS744 is a seven-band stereo equalizer. Each frequency band is individually adjustable to meet individual listening preferences.

The EQS744 also features a subwoofer crossover, subwoofer level control and a master system volume control. The subwoofer output makes use of a built-in 18dB per octave electronic crossover that is fixed at 60Hz or 90Hz.

The EQS744 has the built-in an auxiliary input that allows use with portable devices (such as MP3 player) or a video system.



- | | |
|----------------------|--------------------------------|
| 1. Sub level | 11. 16kHz adjustment |
| 2. Volume control | 12. Power plug |
| 3. AUX switch | 13. Front output |
| 4. Fader control | 14. Rear output |
| 5. 50Hz adjustment | 15. Main input |
| 6. 125Hz adjustment | 16. AUX input |
| 7. 315Hz adjustment | 17. Sub output |
| 8. 750Hz adjustment | 18. AUX gain control |
| 9. 2.2kHz adjustment | 19. Low-pass frequency 60/90Hz |
| 10. 6 kHz adjustment | |

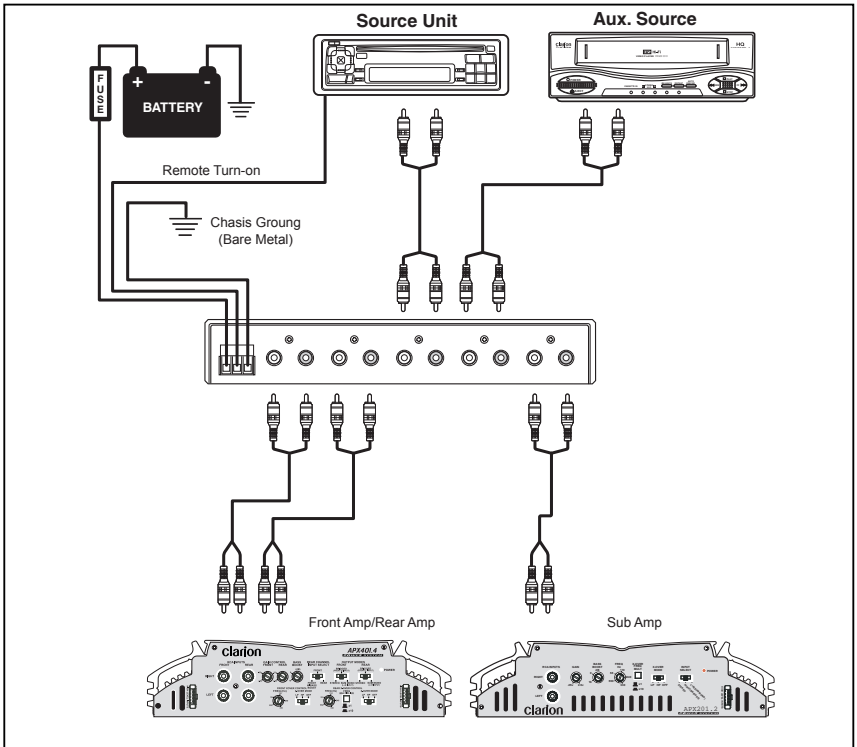
CONTROL GLOSSARY

- **Volume control** - This is the master volume control for the system.
- **Fader control** - This is used to balance the sound between the front and rear speakers.
- **AUX switch** - This allows you to select between the main input and an auxiliary source.
- **Equalizer band frequency adjustment** - This adjustment allows you to adjust the frequency for each of the seven frequency band.

- **Low-pass frequency switch** - This allows the subwoofer crossover to be set at 60Hz or 90Hz.
- **Subwoofer level control** - This is the volume control for the subwoofer. The subwoofer level control allows you to adjust the subwoofer volume at any time to match any listening preference.
- **AUX gain controls** - These controls allow individual left and right input gain adjustment for the auxiliary input.

APPLICATIONS

The system diagram below will help you plan your own installation.



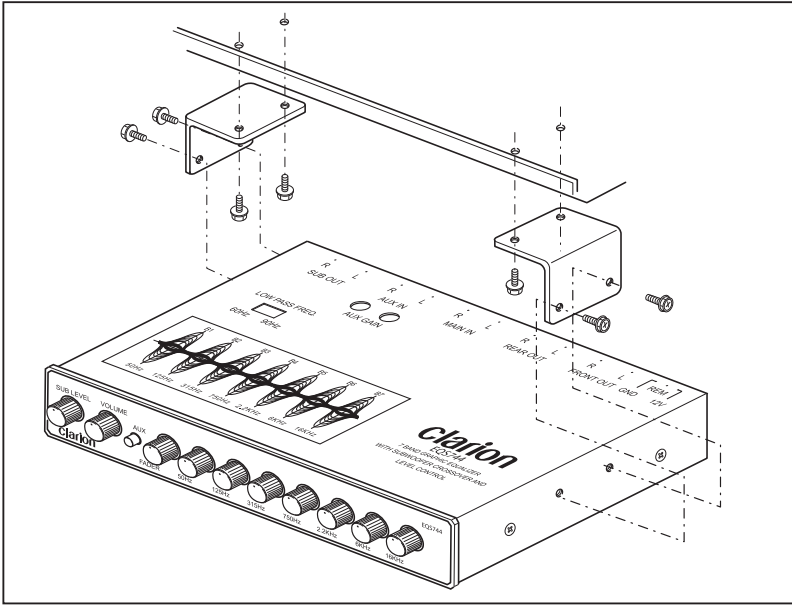
MOUNTING PRECAUTIONS

The EQS744 graphic equalizer can be mounted next to the source unit or under the dash with the supplied mounting brackets. For easy system set-up, mount the equalizer so the front panel controls will be easily accessible from the driver's seat after installation. In addition, observe the following precautions:

1. Check clearances on both sides of a planned installation before drilling any holes or installing any screws.
2. When routing RCA cables, keep them away from power cables and output speaker wires.

APPLICATIONS

3. Do not allow liquids or foreign objects to enter the unit.
4. If the unit should become wet, turn off all power and ask your authorized Clarion dealer to clean or service the unit.



WIRING PRECAUTIONS

Read all wiring precautions. If you are not sure of the connections, contact your authorized Clarion dealer.

1. This unit operates on automotive 12V negative ground power source and requires additional mobile audio components for proper operation.
2. Disconnect the negative (-) lead of the battery before making any power connections.
3. A good chassis ground connection is critical to the performance of your Clarion equalizer. Use the shortest ground wire possible and securely connect to the car chassis along with the source unit ground to minimize resistance and avoid noise problems.
4. Extra cable can cause signal loss and act as an "antenna" for noise. Use only high quality RCA cables that are no longer than necessary to make a direct connection with the source unit and amplifiers.
5. If you are using a source unit, without a remote turn-on lead, the EQS744 can be turned on with a switched accessory lead. You can find this accessory power source in the factory harness at the back of the radio. It is the lead that turns on and off with the key.

SYSTEM SET-UP

Setting System Volume

After completing the system wiring, follow the steps below to properly adjust the EQS744.

1. Turn the master control volume on the EQS744 and the amplifier gain controls to their minimum setting.
2. Turn the source unit on and increase the volume until distortion is heard, then reduce volume just below this point. * Once the source unit volume has been set, it will no longer be used. Always use the volume control on the EQS744 as the master (main) volume control. It has better electronics, higher S/N ratio and is more linear than any source unit volume available.

*** This is the maximum usable musical signal for the source unit. Turning the volume beyond this point will increase noise and distortion without an increase in musical signal.**

Setting Equalizer Controls

The EQS744 provides a graphic adjustment band for each of seven frequency ranges: sub, low, mid, mid-high and high frequency. The center frequency of each band is adjustable to allow fine tuning of the acoustical response of the vehicle.

1. Begin by setting the SUB/LO/MID/MID-HIGH/HIGH frequencies at the center position.
2. Play a favorite music track and adjust individual EQ controls to a desired taste. Avoid extreme settings which can distort musical peaks.
3. Increase or decrease the Equalizer Gain Controls as necessary.
4. If your system includes a subwoofer, slowly increase the Subwoofer control until you hear solid bass.
5. If your system includes rear speakers, adjust the Fader control to add rear sound. Set it to so most of the music comes from the front and only fills the rear.

Setting the Low Pass Frequency

The EQS744 provides a built-in Low Pass Crossover, located on the top panel of the unit. Set at 60Hz or 90Hz depending upon type and size of your subwoofer system.

AUXILIARY INPUT

The EQS744 has a built-in auxiliary input that allows use with portable devices (such as MP3 player) or a video system.

1. Plug the auxiliary source into the auxiliary RCA input.
2. With the auxiliary switch in the main position, turn the equalizer volume control to a normal listening level.
3. With the auxiliary source in the play mode, switch to the auxiliary source..
4. Adjust the auxiliary input gain controls, located on the top panel of the EQS744, so that the volume of the auxiliary source matches the volume of the main source.

TROUBLESHOOTING***Problem***

Unit does not work; no lights.

Solution

Power wires are not connected. Check battery and ground wiring at unit; check battery connections

Problem

Sound is distorted.

Solution

- Source unit volume is set too high. Reduce source unit volume.
- EQ controls are set too high. Turn EQ controls to the center position and listen for distortion again. If problem still occurs, see your authorized Clarion dealer.
- Speakers may be damaged. Consult your authorized Clarion dealer.

Problem

No sound from unit.

Solution

- Wrong input is selected. Press AUX switch so that main inputs are on.
- No Remote-On. Using a voltmeter, check for +12V from Remote-On source.

PRODUCT SPECS

Graphic Center Frequencies	50Hz, 125Hz, 315Hz, 750Hz, 2.2kHz, 6kHz, 16kHz
Boost/Cut	12dB
S/N Ratio	100dB
Frequency Response	10Hz - 50kHz +/-1dB
Maximum Output Voltage	7V RMS
THD	0.005
Input Sensitivity	50mV - 3V RMS
Head Room	20dB
Input Impedance	20kOhms
Output Impedance	2kOhms
Stereo Separation	82dB/1kHz
Operating Voltage	11V - 15V Negative Ground
Size	1-1/8"H x 7"W x 4"H